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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,511	09/04/2001	Esko Heinonen	027650-940	4332

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EXAMINER

HARAN, JOHN T

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 06/04/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,511

Applicant(s)

HEINONEN ET AL.

Examiner

John T. Haran

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-10 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because elements 2 and 7 referred to in the specification are not labeled in the figures. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

In Paragraphs 0012 and 0020 the claims should not be referred to by number in the specification.

In Paragraph 0023 Figures 1A-D should be mentioned, not Figure 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the sealing fin". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergstein et al (U.S. Patent 2,979,995).

Bergstein et al discloses a method and apparatus for thermosealing one end of a packaging container comprising thermosealable material wherein the container is displaced by means of a conveyor in a continuous process at uniform speed through a forming station that contains mechanical forming devices which progressively reform the packaging container end until opposing walls meet to form a sealing fin and then through sealing devices positioned on either side of the conveyor that heat the thermosealable material located in the sealing fin and mechanically press the wall portions together to form a liquid tight seal while allowing for cooling and continued advancement of the container (See Column 3, lines 31-62). Bergstein anticipates claims 1-3.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1733

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4, 6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumayer et al (U.S. Patent 4,145,236) in view of Bergstein et al (U.S. Patent 2,979,995).

Neumayer et al is directed to a method and apparatus for forming and thermosealing one end of a packaging container wherein a container with an open end is placed on a conveyor as brought to a forming station comprising opposed closing plates with edges that flare inwardly and downwardly from the inlet to the outlet such that opposing walls of the container are progressively reformed until the walls meet in a sealing fin. Afterwards the container is conveyed to a sealing device comprising a sonic welding device and anvil that heats the thermoplastic sealing material that performs simultaneous heating and compression to form a liquid tight seal while holding the container in place (Column 6, lines 1-69).

Regarding claims 1-3, Neumayer et al is silent towards sealing the container that involves passing the sealing fin through opposed heaters and then through opposed compression devices that allows for the process to be performed in a continuous manner at uniform speed and allows for the container to cool and be continuously advanced during compression. However it is notoriously well known and conventional that it is preferred to have a manufacturing process and associated apparatus that works in a continuous manner because it is more efficient in terms of time and money and it is also well known and conventional. Furthermore this notoriously well known and conventional goal of a continuous process and associated apparatus is achieved when

Art Unit: 1733

performing sealing operations of containers by passing the container edges through opposed heaters and then through opposed compression devices, as shown for example in Bergstein (Column 3, lines 54-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to seal the end of the container by passing the sealing fin through opposed heaters to activate the thermoplastic material and then through opposed compression devices to form the liquid tight seal in the method and apparatus of Neumayer et al as suggested in Bergstein in order to have a continuous process that allows the container to be cooled continuously advanced during compression.

Regarding claims 4 and 6, Neumayer teaches that the edges (work surface) of the closing plates (folding rails) flare inwardly and downwardly, indicating that the edges go from a first orientation to a second orientation which differ by 90 degrees and at the end of the closing plates the interspacing is approximately the thickness of the sealing fin (See Figure 3, Column 6, lines 9-12).

Regarding claims 9 and 10, one skilled in the art would have readily appreciated that the container was preformed with a mechanical assembly and then brought to the forming device. One skilled in the art also would have readily appreciated that it is common practice to introduce containers to a conveyor assembly using counter-rotating squeezers. It would have been obvious for the apparatus of Neumayer et al to include a performing assembly to introduce the container using common devices such as counter rotating squeezers in the method of Neumayer et al.

Art Unit: 1733

9. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumayer et al (U.S. Patent 4,145,236) in view of Bergstein et al (U.S. Patent 2,979,995) as applied to claim 3 above, and further in view of Dickey (U.S. Patent 3,879,247).

Neumayer et al and Bergstein et al are silent towards having inductors on either side of the conveyor for inducing a heating magnetic field in a layer of conductive material included in the laminate, however such is well known and conventional in the art, as show for example in Dickey (see Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was to include well known and conventional heating means in the apparatus of Neumayer et al, as modified above.

Allowable Subject Matter

10. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to suggest an apparatus for forming and thermosealing one end of a packaging container comprising, in combination with the other claimed limitations, a folding rail with a work surface that starts in a first orientation and ends in a second orientation that differs 90 degrees from the first orientation, **wherein the first orientation is parallel with the longitudinal axis of a packaging containers advanced by the conveyor.**

Art Unit: 1733

Neumayer et al teaches closing plates (folding rails) with edges (working surfaces) that converge inwardly and downwardly from a first orientation to a second orientation that differs 90 degrees from the first, however the first orientation is not parallel with the longitudinal axis of travel (See Figure 3) and there is no suggestion for it to be.

King et al (U.S. Patent 3,699,743) and Ylonen et al (U.S. Patent 5,809,743) both teach folding rails that converge towards a sealing means, however the first orientation is not parallel with the longitudinal axis of travel and there is no suggestion for it to be. (See King Column 16, lines 58-68 and Ylonen et al Column 3, lines 36-41).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(703) 305-0052**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Application/Control Number: 09/889,511

Page 8

Art Unit: 1733

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-

0661.

A handwritten signature in black ink, appearing to read "JTH", written over the printed name.

John T. Haran

May 31, 2003